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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/814,165 | 04/01/2004 | Tae Min Kim | K-0630 | 7365 |
| <div>34610 7590 07/17/2007</div> <div>KED & ASSOCIATES, LLP</div> <div>P.O. Box 221200</div> <div>Chantilly, VA 20153-1200</div> | | | | |
| | | | <div>EXAMINER</div> <div>KOCZO JR, MICHAEL</div> | |
| | | | <div>ART UNIT</div> <div>3746</div> | <div>PAPER NUMBER</div> |
| | | | <div>MAIL DATE</div> <div>07/17/2007</div> | <div>DELIVERY MODE</div> <div>PAPER</div> |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,165

Applicant(s)

KIM ET AL.

Examiner

Michael Koczo, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

In paragraph 0039, line 2, --150a-- should be inserted following "suction pipe".

In paragraph 0049, line 2, "passed" should read --passing--.

In paragraph 0051, line 1, "passed" should read --passing--.

Uniform terminology must be maintained throughout the specification. For example, paragraph 0049, line 4 refers to a "discharge muffler", whereas paragraph 0050, line 3 refers to a "discharge silencer".

Paragraph 0053 does not read grammatically correct.

Appropriate correction is required.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Numeral 330c' (para. 0050).

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the rubber seats of claim 19 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 20 is objected to because of the following informalities: in the bottom line, “tube” should read --tubes--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2 to 5, 8 to 13, 15 and 17 to 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 2 is redundant since a loop is inherently bent once.

In claim 3, the "transit tube" is recited in a structurally disconnected manner. To what structure is the transit tube connected?

In claim 4, there is no antecedent basis for "the transit tubes".

The claims are replete with terminology such as "lower", "upper", "upward", "top", "under" and "underside". No structural reference frame is provided in the claims for these terms to give them meaning.

In claim 17, it is not clear what is the intended structural limitation of "pseudo discharge muffler".

In claim 19, there is no antecedent basis for "each corner of the supporting parts". It would appear that deleting "each corner of" would overcome this rejection.

Thorough revision of the claims is required in order to render them definite in form according to the statute.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 to 5, 7 to 11, 13 to 16, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCloy (US 3,066,857) in view of Roelsgaard (US 3,187,996). McCloy discloses an hermetic compressor having a muffler 48 and a loop pipe 50 connected to the

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muffler and to the hermetic container 12 for discharging the refrigerant to the outside of the hermetic container. However, McCloy does not disclose that the loop pipe 50 is made of a synthetic resin. Roelsgaard discloses an hermetic compressor having a pipe 21 connecting the compressor and the casing (fig. 2). The pipe 21 is connected to transit tubes 14a. The pipe 21 is made of a synthetic plastic having a thermal conductivity lower than metal in order to reduce heat transfer from the pipe 21 into the interior of the casing 2. In view of this teaching, it would have been obvious to make the pipe 50 of McCloy of a synthetic plastic or resin having a low thermal conductivity. Regarding claim 5, since compressors and casings are conventionally made of metal, it would have been obvious to one of ordinary skill in the art to form the transit tubes of metal to provide rigid support for the ends of the loop pipe.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCloy in view of Roelsgaard, as applied to claim 1 above, and further in view of Yoshimura et al (US 6,152,703). Yoshimura et al disclose a suction pipe for an hermetic compressor that is made of Teflon. Teflon is a material having low heat conductivity (see col. 44, l. 58). In view of this teaching, it would have been obvious to make the loop pipe 50 of McCloy, as previously modified, of Teflon.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCloy in view of Roelsgaard, as applied to claim 10 above, and further in view of Androne et al (US 4,478,559). Androne et al disclose a hermetic compressor having a balance weight 42 on the rotation shaft to reduce vibration. In view of this teaching, it would have been obvious to provide the rotation shaft 26 of McCloy with a balance weight.

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Claim 17, as can be understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over McCloy in view of Roelsgaard, as applied to claim 1 above, and further in view of Seo (US 2004/0009077). Seo discloses plural mufflers 110 and 120 on opposite sides of a compressor for improved noise attenuation. In view of this teaching, it would have been obvious to provide the compressor of McCloy with plural mufflers.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCloy in view of Roelsgaard, as applied to claim 18 above, and further in view of Hull (US 2,961,149). Hull discloses a compressor inside a casing 12. The underside of the casing 12 has rubber seats 14 for reducing vibration (col. 4, para. 1). In view of this teaching, it would have been obvious to provide the supporting parts of the casing 12 of McCloy with rubber seats.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

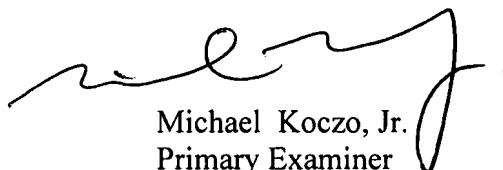
Any inquiry relating to patent applications in general should be directed to the Patent Assistance Center at 1-800-786-9199.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Koczo, Jr. whose telephone number is 571-272-4830. The examiner can normally be reached on M-Th; 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony D. Stashick can be reached at 571-272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Michael Koczo, Jr.', with a stylized flourish at the end.

Michael Koczo, Jr.
Primary Examiner
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